# Applied Physics B

# Photophysics and Laser Chemistry

# Volume B 42 1987

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## PHYSICS AND ASTRONOMY CLASSIFICATION SCHEME (PACS)

Shortened version for use in classifying papers for Applied Physics

### GENERAL

- Mathematical methods in physics
- Measurement science and metrology
- 07 Specific instrumentation
- 07.60 Optical instruments and techniques,
  - detection of radiation
  - 07.65 Optical spectroscopy and spectrometers 07.75 Mass spectrometers and mass-spectroscopy techniques
  - 07.80 Electron and ion microscopes and spectrometers; techniques
  - 07.85 X- and gamma-ray instruments and techniques

### ATOMIC AND MOLECULAR PHYSICS

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- Experimentally derived information on atoms and molecules
- Studies of special atoms and molecules (macro- and polymer molecules, clusters)

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  - 42.55 Laser processe
    - C Pumping mechanisms
    - E Molecular gas lasers (CO<sub>2</sub>, CO, N<sub>2</sub>O, formaldehyde)
    - G Excimer lasers
    - H Atomic, ionic, and other gas lasers
    - M Laser action in liquids and organic dyes
    - Lasing action in semiconductors
    - R Laser action in solid-state lasers
    - T Free-electron lasers
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    - D Laser resonators, cavities, and amplifiers
    - Laser beam deflection and focusing
  - Laser beam modulation, mode locking, and tuning 42.65 Nonlinear optics
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  - 42.70 Optical materials
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### PHOTOPHYSICS and LASER CHEMISTRY

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Fast-axial-flow CO2 laser with integrated turbo-blower. Appl.Phys.B 42/4, 233-236 (1987) PACS:42.60B 42.55 Bello del U., Churakov V., FuB W., Kompa K.L., Maurer B., Schwab C., Werner L.: Improved separation of the rare sulfur isotopes by infrared

multiphoton dissociation of SF6. Appl.Phys.B 42/3, 147-153 (1987) PACS:82.50 33.00 35.00

Berdowski J.: The influence of surface and volume effects on the light dif-

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Two-color TEA CO2 laser oscillation on the lines of regular and hot bands

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Davies P.B., Morton-Jones A.J.: Evaluation of jet-cooled laser spectroscopy for simplifying infrared spectra: Results for CO, PF3, CF3Cl, cyclopropane, vinyl fluoride and methylacetylene (propyne).

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Langbein U. Lappalainen R. Larciprete R. Lederer F. Leong W.Y. Leppihalme M. Lew H. Llopis J. Luk T.S.	Wächter C. Lappalainen R. Larciprete R. Wächter C. Kubiak R.A.A. Peder-Gothoni A. Lew H. Ochando M.A. Jara H.	B 42/3, 161-164 (198 A 42/4, 263-267 (198 B 42/3, 181-184 (198 B 42/3, 161-164 (198 B 42/3, 197-200 (198 -MB 42/1, 45-49 (1987) B 42/1, 5-10 (1987) A 42/3, 209-212 (198 B 42/1, 11-15 (1987)	7) 66.30 7) 07.75 7) 44.82 7) 72.20 42.65 07.65 7) 61.16	Saleh N.S. Salimbeni R. Saltiel S.M. Satooka S. Schätzel K. Schluckebier M. Schluckebier M. Schmeider O. Schmidt-Iglesia: Schmidl E. Schmülling W.	Al-Saleh K.A. Pini R. Saltiel S.M. Kato S. Schätzel K. Schluckebier M. Kunst M. EPI F. Finzel HU. Schluckebier M.	A 42/3, 179-192 (1987) A 42/1, 57-64 (1987) B 42/2, 85-89 (1987) A 42/1, 87-90 (1987)	42.65 42.65 82.50 05.40 61.80
Maass W. Mahmud Y.A.	Duschl-Maass M. Mahmud Y.A.	A 42/2, 117-124 (198 A 42/2, 129-131 (198		Schmülling W.	Schluckebier M. Chen C.S.		) 61.80

Name	First Author	Applied Physics	PACS	Name	First Author	Applied Physics	PACS
Schwab C.	Bello del U.	B 42/3, 147-153 (1987)	82.50	Vannini M.	Pini R.	B 42/2, 111-113 (1987)	42.65
Seguin H.J.J	Seguin V.A.	B 42/4, 239-244 (1987)	52.80	Venaik A.	Gupta A.K.	A 42/2, 167-171 (1987)	73.40
Seguin V.A.	Seguin V.A.	B 42/4, 239-244 (1987)	52.80	Voges H.	Steyer M.	B 42/3, 155-160 (1987)	42.5G
Sharma S.K.	Gupta A.K.	A 42/2, 167-171 (1987)	73,40				
Shaw P. S.	Gilgen H.H.	B 42/2, 55-66 (1987)	81.10	Wächter C.	Wächter C.	B 42/3, 161-164 (1987)	44.82
Shen Y.R.	Guyot-Stonnest P.			Wahl M.	Jacobs A.	B 42/3, 173-179 (1987)	82.50
Sidorov A. I.	Balykin V.I.	B 42/1, 51-54 (1987)	42.65	Weidner M.	Sperber P.	B 42/3, 185-192 (1987)	42.5M
Siegman, A.E.	Siegman, A.E.	B 42/3, 165-166 (1987)	42.60	Weller R.	Jacobs A.	B 42/3, 173-179 (1987)	82.50
Siffert P.	Adekoya W.O.	A 42/3, 227-232 (1987)	81.40	Werner L.	Bello del U.	B 42/3, 147-153 (1987)	82.50
Siffert P.	Martinez J.	A 42/4, 273-277 (1987)	73,40	Wettling W.	Rupp G.	A 42/1, 45-55 (1987)	75.00
Simpson R. I	Beling C.D.	A 42/2, 111-116 (1987)	78.80	Whall T.E.	Kubiak R.A.A.	A 42/3, 197-200 (1987)	72.20
Slater R.	Slater R.	B 42/1, 17-20 (1987)	82.50	Wildmann D.	Wildmann D.	B 42/3, 129-145 (1987)	42.6B
Slinger C.W.	Slinger C.W.	B 42/2, 121-128 (1987)		Williams W.S.	Kaloyeros A.	A 42/2, 139-143 (1987)	82.80
Solymar L.	Slinger C.W.	B 42/2, 121-128 (1987)	42.20	Winnacker A.	Haegel N.M.	A 42/3, 233-237 (1987)	78.55
Sperber P.	Sperber P.	B 42/3, 185-192 (1987)	42.5M	Wishah K.A.	Mahmud Y.A.	A 42/2, 129-131 (1987)	72.20
Stever M.	Stever M.	B 42/3, 155-160 (1987)	42.5G	Wißmann P.	Finzel HU.	A 42/1, 87-90 (1987)	73.60
Stuke M.	Larciprete R.	B 42/3, 181-184 (1987)	07.75	Wolfrum J.	Jacobs A.	B 42/3, 173-179 (1987)	82.50
Stulik D.	Stulik D.	A 42/3, 239-243 (1987)	79.20				
Sun Xd.	Yang X1.	A 42/1, 65-67 (1987)	73,40	Yamamoto H.	Yamamoto H.	A 42/3, 245-248 (1987)	79.80
Syms R.R.A.	Slinger C.W.	B 42/2, 121-128 (1987)		Yang X1.	Yang X1.	A 42/1, 65-67 (1987)	73.40
.,				Yankov P.D.	Saltiel S.M.	B 42/2, 115-119 (1987)	42.65
				Yijiang C.	Yijiang C.	B 42/1, 1-3 (1987)	42.80
Takeuchi K.	Kato S.	B 42/3, 167-172 (1987)	82.50				
Teng P.	Teng P.	B 42/2, 73-78 (1987)	52.00	Zhang J.	Zhang J.	A 42/4, 317-326 (1987)	
Tittes J.	Dlubek G.	A 42/2, 125-127 (1987)	61.80	Zhang J.P.	Harith M.A.	A 42/1, 35-39 (1987)	61.10
Tochitsky S. Ya.	Churakov V.V.	B 42/4, 245-249 (1987)		Zheludev N.J.	Saltiel S.M.	B 42/2, 115-119 (1987)	
Tominaga T.	Kato S.	B 42/3, 167-172 (1987)	82.50	Zhou Nf.	Yang X1.	A 42/1, 65-67 (1987)	73.40